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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,632	06/20/2003	Catherine Marie Wilson	CH2764 USCNT	7179

23906 7590 08/26/2004

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,632	Applicant(s) WILSON ET AL.	
	Examiner Charles A. Fox	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore the tilting means, the service port for supplying gas to the membrane, a gas source, the rigging points at the corners of the manifold must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A group consisting of 9,12,13 and 14 is not defined in any manner in either the specification, drawings or the claims. Therefore this limitation of the claim is not enabled.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regards to claim 1 the last line does not make sense. It is not understood what is "throughout the powders entire mass". Does the membrane impart enhanced flow characteristics to the entire mass of powder? In regards to claim 14 a group consisting of 9,12,13 and 14 is not defined in any manner. It is impossible to define the scope of the claim as written. Claim 14 has not been further treated on the merits.

Claim 1 recites the limitation "the bulk powder" in line 21. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,8,9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of Podd et al. In regards to claims 1-4 Clarke et al. US 3,819,070 teach a system for unloading bulk material comprising:

a bulk container (10) having surrounding walls, a roof, a floor mounted on a structural frame a closed front end, and a rear end at least partially open;

a platform having a means to tilt said container at least 40° from a substantially horizontal position;

a manifold (70) having an inlet and discharge sections connecting to the rear of said container over said opening;

wherein the inlet of the manifold (59) is joined to a support member (58) that is sized to cover fully the rear end of said container.

Clarke et al. do not use a permeable membrane to aid the flow of material through the manifold.

Podd et al. US 5,547,331 teach using a permeable membrane (12) for increasing the flow of a bulk material when unloading a bulk material container. Wherein said membrane has a compressed gas applied to it from a source of pressurized gas. It would have been obvious to one of ordinary skill in the art, at the time of invention to place the membrane taught by Podd et al. in the device taught by Clarke et al. in order to aid in the flow of material through the manifold as the container is being unloaded.

In regards to claims 5 and 6 Clarke et al. further teach that the manifold is removably attached to the rear of the container. Clarke et al further teach the manifold being removably mounted to the platform. See figures 5-8.

In regards to claim 8 Clarke et al. further teach that the manifold is hopper shaped. See column 7 lines 27-35.

In regards to claim 9 Clarke et al. further teach a flexible liner within the container with a bulkhead between the flexible liner and the opening at the rear of the container. While Clarke et al do not specify a material for the bulkhead It would have been obvious

to one of ordinary skill in the art, at the time of invention that cardboard is a rigid material that is rupturable to allow the unloading of the material.

In regards to claim 13 Clarke et al. also teach that the manifold is rigidly connected to the platform. See figure 5.

In regards to claims 15-17 Clarke further teaches that:

the manifold is connected by a flange (58) to the container;

the manifold is moved into attachment to the rigid bulkhead by rigging points (650) at the corners of the container;

and that said manifold is built into a tilting frame section. See figure 5.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of Podd et al. as applied to claim 1 above, and further in view of the admitted prior art. Clarke et al. and Podd et al. teach the limitations of claim 1 as above, Podd et al. further teach the permeable membrane, they do not teach the membrane as being microporous. The admitted prior art teaches using a microporous membrane in a pneumatic conditioning membrane. See page 9 lines 14-20. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Clarke et al. in view of Podd et al. with the membrane as taught by the admitted prior art as they are well known in the art and readily available for purchase.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. and Podd et al. as applied to claim 1 above, and further in view of Boldman. Clarke et al. and Podd et al. teach the limitations of claim 1 as above, Clarke et al further teach using vibrators in the manifold to aid in the flow of bulk material. They

do not teach vibrators in the container. Boldman US 2,229,037 teaches using vibrators (16) on the floor of a container (1) carrying bulk material, wherein said vibrators are spaced to aid in the flow of material when unloading said container. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the vibrators as taught by Boldman to the device taught by Clarke et al. and Podd et al. in order to have the bulk material exit the container at a faster rate. The placement of the vibrators is considered a design choice that would have been obvious to one of ordinary skill in the art.

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Hicks, Jr. 1978, Dibble et al. 1999, Brattlie 2000, Brown 2002 and Wilson et al. 2003.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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8-14-04